

Work Order ID 104654

\*104654\*

Page 1

August-20-13 8:21:46 AM

Item ID:	D2944	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:						
Item Name:	Step Mounting Plate				Stop	*NS2*
Start Date:	7/26/13	Start Qty: 40.00	*40*	Cust Item ID:		
Required Date:	7/26/13	Req'd Qty: 40.00	*40*	Customer:		

Reference:

Approvals:	Process Plan: M65	Date: 13-08-20	Tooling:	Date:	Run	Start	*NR1*
QC:		Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								

D2944	Rev A								
-------	-------	--	--	--	--	--	--	--	--

100 \*100\* FLOW WATER JET 0.00

Waterjet Memo 0.00

FLOW CNC Waterjet 1-Cut as per Dwg D2944

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

40 0 Ac 13-08-25

110 \*110\* QC2- Inspect parts off machine FAI/FAIB 0.00

QC Memo 0.00

Quality Control

40 0 Ac 13-08-26

120 \*120\* QC8- Inspect parts - second check 0.00

QC Memo 0.00

Quality Control

DAS  
27  
9-89  
B826

40 0 1  
Can

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending				Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>				
Centre Not Concentric to O/S				BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>				
Cracks				Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>				
Crushed/Crimped				Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>				
Cuffs				Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>					
Heat Treat				Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>					
Inspection Strip in Tube				Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>					
Ripples in Bend				Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>	<input type="checkbox"/> Other					
Torque Waves in Extrusion				Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>						
Turning Sequence				Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>						
Wave/Twist in Tube				Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>						

Work Order ID 104654

August-20-13 8:21:47 AM

\*104654\*

Page 2

Item ID: D2944

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Step Mounting Plate

Start Date: 7/26/13 Start Qty: 40.00

\*40\*

Cust Item ID:

Required Date: 7/26/13 Req'd Qty: 40.00

\*40\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run

Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

Identify as per dwg & Stock Location: W-003 0.00

\*130\*

Packaging

Memo

0.00

Packaging

\*\*\* STOCK IN STEP CELL\*\*\*

40 d MLJ 13-08-26

140

QC21- Final Inspection - Work Order Release

0.00

\*140\*

QC

Memo

0.00

Quality Control

MLJ 13-08-26

MLJ 13-08-26

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
			Work Order Update <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Large Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
						Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear	General										
	Bending <input type="checkbox"/>	Bend <input type="checkbox"/>	Grain <input type="checkbox"/>	Ovalized <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>						
	Centre Not Concentric to O/S <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Hardware <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>						
	Cracks <input type="checkbox"/>	Broken/Damaged <input type="checkbox"/>	Inspection Incomplete <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Weld <input type="checkbox"/>						
	Crushed/Crimped <input type="checkbox"/>	Burrs <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>						
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Maintenance <input type="checkbox"/>	Part Moved <input type="checkbox"/>							
	Heat Treat <input type="checkbox"/>	Countersink <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>							
	Inspection Strip in Tube <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Misread <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>						
	Ripples in Bend <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Offset <input type="checkbox"/>								
	Torque Waves in Extrusion <input type="checkbox"/>	Drawing <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>								
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>								
	Wave/Twist in Tube <input type="checkbox"/>	Folio <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>								

# Picklist Print

Page 1

August-20-13 8:21:56 AM

Work Order ID: 104654

\*104654\*

Parent Item: D2944

\*D2944\*

Parent Item Name: Step Mounting Plate

Start Date: 7/26/13

Required Date: 7/26/13

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP B04.01.21Reformat; Added Step 6KJ/RF  
IPP C 06.07.21 waterjet EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B0.187X04.00 0		Purchased	No			100	f	122.8400	0.2458	10.34947			

\*M6061T6B0 187X04 000\*

6061-T6 Bar .187 x 4.00

\*\* 10.35 Ac 13.08.25

Location	Loc Qty	Loc Code
MAT051	122.84	
123279	22.84	
<u>125590</u>	100	<u>i25590</u>

NCR: Yes / No

DQA: Date:

## **WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
				Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	Bend	Grain	Ovalized	Pressure/Forced							
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure							
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect								
Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing								
Cuffs	Contamination	Maintenance	Part Moved								
Heat Treat	Countersink	Mislabeled	Positioned Wrong								
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge								
Ripples in Bend	Drill Holes	Offset	Other								
Torque Waves in Extrusion	Drawing	Out of Calibration									
Turning Sequence	Finish	Out of Sequence									
Wave/Twist in Tube	Folio	Outside Dimensions									

DART AEROSPACE LTD	Work Order:	10965Y
Description: Step Mounting Plate	Part Number:	D2944
Inspection Dwg: D2944	Rev: A	Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

03

Measured by:	<u>Ae</u>	Audited by:	<u>9-89</u>	Prototype Approval:	N/A
Date:	<u>13.08.25</u>	Date:	<u>B. J. JS</u>	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.11.27	New Issue	KJ/RF	
B	07.09.06	Dimensions added	KJ/JLM	E

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

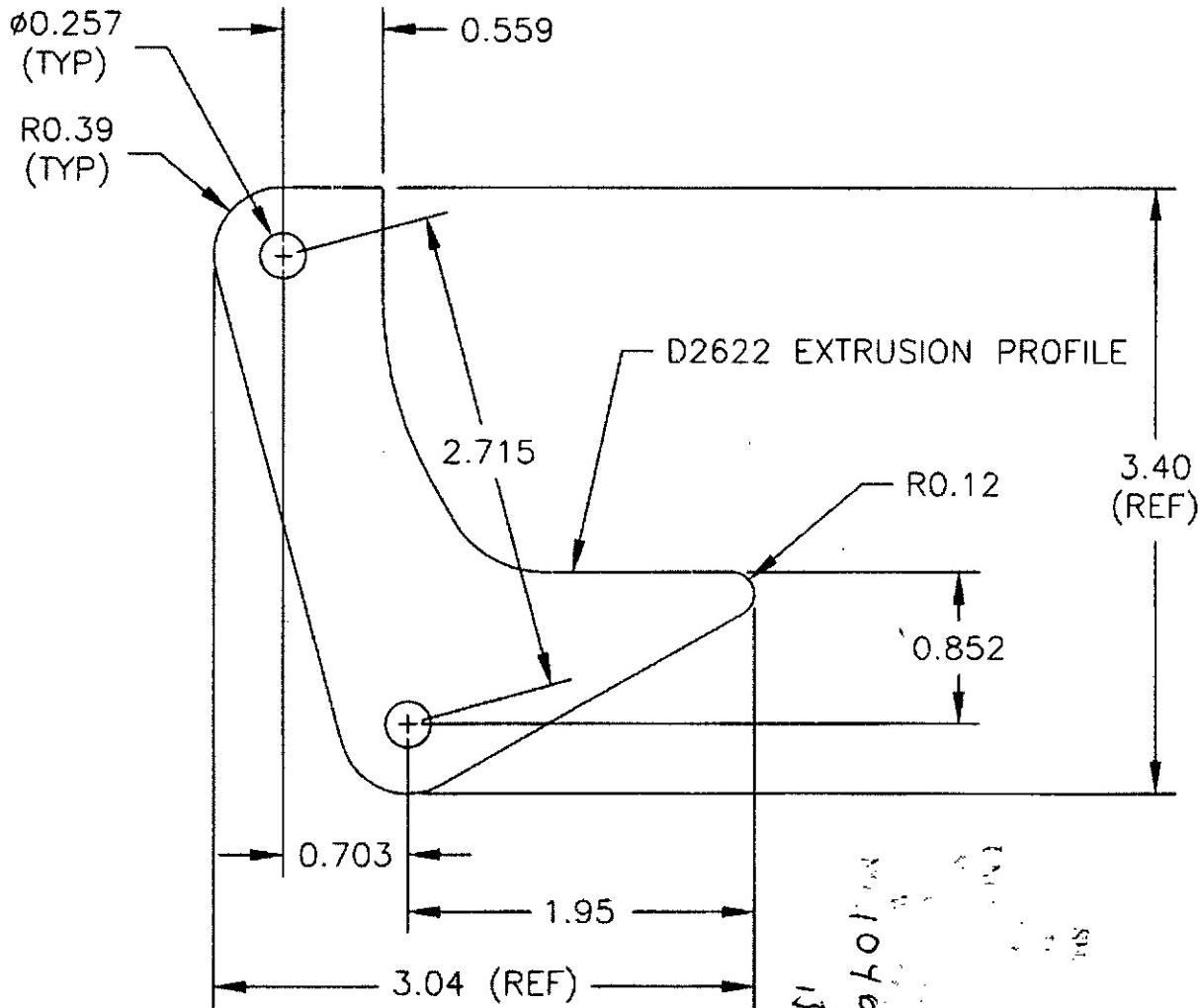
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
NCR No. _____	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
	Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear			General							
	Bending <input type="checkbox"/>		Bend <input type="checkbox"/>		Grain <input type="checkbox"/>		Ovalized <input type="checkbox"/>		Pressure/Forced <input type="checkbox"/>	
	Centre Not Concentric to O/S <input type="checkbox"/>		BOM/Route <input type="checkbox"/>		Hardware <input type="checkbox"/>		Over/Under tolerance <input type="checkbox"/>		Temperature/Cure <input type="checkbox"/>	
	Cracks <input type="checkbox"/>		Broken/Damaged <input type="checkbox"/>		Inspection Incomplete <input type="checkbox"/>		Part Incorrect <input type="checkbox"/>		Weld <input type="checkbox"/>	
	Crushed/Crimped <input type="checkbox"/>		Burrs <input type="checkbox"/>		Instructions Incomplete/Unclear <input type="checkbox"/>		Part Lost/Missing <input type="checkbox"/>		Wrong Stock Pulled <input type="checkbox"/>	
	Cuffs <input type="checkbox"/>		Contamination <input type="checkbox"/>		Maintenance <input type="checkbox"/>		Part Moved <input type="checkbox"/>			
	Heat Treat <input type="checkbox"/>		Countersink <input type="checkbox"/>		Mislabeled <input type="checkbox"/>		Positioned Wrong <input type="checkbox"/>			
	Inspection Strip in Tube <input type="checkbox"/>		Cut Too Short <input type="checkbox"/>		Misread <input type="checkbox"/>		Power Loss/Surge <input type="checkbox"/>			
	Ripples in Bend <input type="checkbox"/>		Drill Holes <input type="checkbox"/>		Offset <input type="checkbox"/>		Other <input type="checkbox"/>			
	Torque Waves in Extrusion <input type="checkbox"/>		Drawing <input type="checkbox"/>		Out of Calibration <input type="checkbox"/>					
	Turning Sequence <input type="checkbox"/>		Finish <input type="checkbox"/>		Out of Sequence <input type="checkbox"/>					
	Wave/Twist in Tube <input type="checkbox"/>		Folio <input type="checkbox"/>		Outside Dimensions <input type="checkbox"/>					



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>M</i>	APPROVED <i>H</i>	DRAWING NO. D2944	REV. A SHEET 1 OF 1	
DATE 99.12.13		TITLE STEP MOUNTING PLATE	SCALE 1:1	
A	99.12.13	NEW ISSUE		

RELEASED  
49-12-21 DS



MATERIAL: 6061-T6 ALUMINUM (QQ-A-250/11) 0.188 THICK

BREAK ALL SHARP EDGES 0.010 TO 0.020 MAX

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE IN INCHES

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
				Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio							
				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge							
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							
				<input type="checkbox"/> Other							